

# Traumatic Brain Injury

## and Suicide Risk

People who experience a traumatic brain injury (TBI) are at increased risk of suicide. Research shows they are two to four times as likely to die by suicide compared to the general public.<sup>1</sup> A TBI is usually caused by a forceful blow to the head. Common causes include sports injuries, falls, car accidents and military combat. Concussions and skull fractures are common types of TBI.

The risk of suicide is highest six months after receiving medical care but can persist for years following an injury.<sup>2</sup>

If you or a loved one has experienced TBI, be alert to the risk factors and warning signs and learn how to get help.

### Suicide Risk Factors Specific to TBI

- Age at time of injury (the younger the age the greater the risk)
- Intensity of pain
- Severity and number of TBIs
- Frequency of suicidal ideation
- Difficulty with impulse control
- Rapid mood changes, especially difficulty managing anger or aggression
- Memory issues
- Difficulty with problem solving
- Seizures

<sup>1</sup> Wadhawan, Abhishek, et al. "Traumatic brain injury and suicidal behavior: a review." *Journal of Alzheimer's disease* 68.4 (2019): 1339-1370.

<sup>2</sup> Madsen, Trine, et al. "Association between traumatic brain injury and risk of suicide." *Jama* 320.6 (2018): 580-588.



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## Other Suicide Risk Factors

Other suicide risk factors may be more common among people with TBI, including:

- Divorce or loss of friends and family
- Financial difficulties, such as loss of employment or housing
- Post-traumatic stress disorder, often known as PTSD
- Major depressive disorder (prior to or following TBI)
- Alcohol or substance use
- Exposure to early childhood trauma or psychological trauma
- Insomnia
- Social isolation
- Previous suicide attempt

## Warning Signs of Suicide

- Dramatic change in mood from post TBI baseline (most significant warning sign)
- Loss of interest in activities usually found enjoyable
- Talking or writing about suicide
- Decreased social interaction, self-care or grooming
- Feelings of hopelessness or worthlessness
- Putting affairs in order, giving things away, making changes in a will

- Stockpiling medications or seeking other means to kill oneself
- Increased use of alcohol or other substances

## How You Can Help

If someone you know is exhibiting these warning signs, ask them: “Are you having thoughts of suicide?” Do not be afraid to ask – it will not put thoughts of suicide in their head – rather, it shows you care and want to help. Offer to call the 988 Suicide and Crisis Lifeline.

## Helpful Resources

- **988 Suicide and Crisis Lifeline:**  
Visit [988lifeline.org](https://988lifeline.org)
- Learn about Traumatic Brain Injury at **National Institutes of Health:**  
[ninds.nih.gov/health-information/disorders/traumatic-brain-injury-tbi](https://ninds.nih.gov/health-information/disorders/traumatic-brain-injury-tbi)
- Visit the **Brain Injury Association** website:  
[biausa.org/public-affairs/media/depression-suicide-after-brain-injury](https://biausa.org/public-affairs/media/depression-suicide-after-brain-injury)
- Learn about **TBI Support Groups:**  
[texashhs.org/supportgroups](https://texashhs.org/supportgroups)
- Watch **Educational Videos:**  
[texashhs.org/educationalvideos](https://texashhs.org/educationalvideos)
- Visit our **General Resources webpage:**  
[texashhs.org/generalresources](https://texashhs.org/generalresources)

